Figure 10 is a schematic view of a strut suspension assembly with opposed springs like that of Figure 9.

Figure 11 is a side view of the opposed spring suspension having air-bag compression and coil tension springs mounted side by side on a wheel axle support.

Figure 12 shows schematically four wheel one at each corner of the chassis whereat the suspension of the invention may be located.

DETAILED DESCRIPTION OF THE INVENTION

A vehicle spring system 10 is schematically shown in Figure 1 placed between a chassis having a sprung weight 11 and a plurality of wheel axle supports 12 each carrying a portion of an unsprung weight 13. As used through this disclosure the term chassis 11 refers to that which is carried by each of the one or more the wheel axle supports 12 as sprung weight. The meanings of the terms "chassis and/or body" or "chassis/body" in the originally filed application are the parts of the vehicle that ride on the springs so the weight thereof is carried. Those combined terms seek to cover vehicles with separate frames, those with unitized bodies and those constructed with a unitized body with or without front and rear sub frames to carry the axles. An opposed spring system 14 includes a resilient load bolster 15 such as for example a coil, air, elastic, torsion or leaf spring, Figures 3 to 11. The resilient load bolster 15 mounts between the chassis 11 and the wheel axle support 12 to carry, when preloaded; the chassis 11 at a preset ride height relative to the wheel axle support 12, see coil springs in Figures 3 through 11. A resilient member 16 such as tension or compression air or coil springs elastic restraints are mounted affixed between each wheel axle support 12 and the chassis 11, Figures 3 to 11. The particular resilient member 16 exerts increasing force there between as a function of the amount of motion of the unsprung weight 13 relative to the chassis 11.

Illustrated on the graph of Figure 2 the relative opposing spring effects of the resilient load bolster 15 and the resilient member 16 are shown with respect to a typical compression load supporting suspension between points H and J as a